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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/776,470 | 02/02/2001 | Ioannis Pavlidis | H0001072 | 7145 |

128 7590 03/16/2004

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| EXAMINER |
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BALI, VIKKRAM

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| ART UNIT | PAPER NUMBER |
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2623

DATE MAILED: 03/16/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,470

Applicant(s)

PAVLIDIS, IOANNIS

Examiner

Vikkram Bali

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-5,7-10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tessal (WO 98/08431).

With respect to claim 1, Tessal discloses the thermal imaging of face of a person and using that determining a physiological state of a person, (see figure 3, and page 2, lines 20-33) as claimed.

With respect to claim 2, he further discloses, determine anxiety in the person, (see page 1, lines 22-26, the nervousness of the person "anxiety") as claimed.

With respect to claim 3, he further discloses, at least a region proximate an eye of the person, (see figure 2, the region is forehead, it is very close to the eye "proximate an eye") as claimed.

With respect to claims 4 and 7, he further discloses, comparing the thermal image data to a base line reference, (see Abstract, comparison to the base line resting values "baseline reference") as claimed.

With respect to claim 8, he further discloses, thermal image data of the face compared to the thermal image data of a different region of the face, (see figure 2 the regions 2 and 3 and page 11 lines 10-25 the images of the region 2 and 3 are compared) as claimed.

With respect to claim 10, he further discloses, providing image data of a face, and identifying ... on at least bilateral symmetry of the ... face, (see figure 2, the thermal image of the face and the two sides of the face i.e. 2 and 3 are the bilateral symmetry of the face) as claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tessal (WO 98/08431).

With respect to claim 5, Tessal discloses the invention substantially as discloses and as described above in claim 3. However, he fails to explicitly disclose the periorbital region proximate the eye, as claimed. But, as suggested in the page 4, lines 29-35, any other symmetrical located regions on the face can be use to attain the

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invention as described in the reference. And, the set of eyes are the symmetrically located on the face of the eye. Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to simply work on the suggestion of the Tessel in order to come up with a thermal detection of the physiological state of the person.

With respect to claim 6, he further discloses, the cheek region, (see page 4, lines 31) as claimed.

With respect to claim 9, it is well known in the art of identifying to use the face detection algorithm from a scene. Therefore, one ordinary skilled in the art at the time of invention simply use the conventional way of selecting of extracting the face information from a scene using some algorithm in order to get to the regions of the face.

Claims 11-20 are rejected for the same reasons as set forth in the rejection of claims 1-10, because claims 11-20 are the system claims for the method claims 1-10.

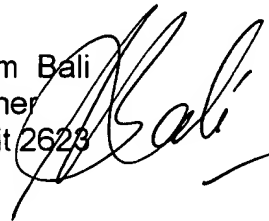
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 703.305.4510. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703.308.6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vikkram Bali
Examiner
Art Unit 2623



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March 10, 2004